ABSTRACT OF THE DISCLOSURE

A humming transcription system and methodology is capable of transcribing an input humming signal into a standard notational representation. The disclosed humming transcription technique uses a statistical music recognition approach to recognize an input humming signal, model the humming signal into musical notes, and decide the pitch of each music note in the humming signal. The humming transcription system includes an input means accepting a humming signal, a humming database recording a sequence of humming data for training note models and pitch models, and a statistical humming transcription block that transcribes the input humming signal into musical notations in which the note symbols in the humming signal is segmented by phone-level Hidden Markov Models (HMMs) and the pitch value of each note symbol is modeled by Gaussian Mixture Models (GMMs), and thereby output a musical query sequence for music retrieval in later music search steps.